



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re application of: Hu et al.

Application Serial No.: 09/219,442

Group Art Unit: 1647

Filed: December 23, 1998

Examiner: Saoud, C.

For: Vascular Endothelial Growth Factor 2

Atty. Docket No.: PF112P2D1

#16  
H.G.J  
3/27/01

**SECOND SUPPLEMENTAL INFORMATION DISCLOSURE**  
**STATEMENT PURSUANT TO 37 CFR 1.97(c)**

Commissioner For Patents  
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of a claim of the subject application, Attorneys for Applicants hereby direct the Examiner's attention to references EA-EW listed on the attached form PTO/SB/08A. A copy of each of references EA-EW is enclosed.

Attorneys for Applicants further wish to bring to the attention of the Examiner:

- (a) Statutory Declaration of John Stanley Mattick, and Exhibits JSM1-JSM4;
- (b) Statutory Declaration of Nicholas Kim Hayward, and Exhibits NKH1-2;
- (c) Statutory Declaration of Jennifer Ruth Gamble and Exhibits JRG1-3;
- (d) Statutory Declaration of Tom Rapoport and Exhibits TP1-2;
- (e) Statutory Declaration of Stuart A. Aaronson and Curriculum Vitae of Stuart A.

Aaronson;

- (f) Statutory Declaration of Susan Power, Appendices 1-2 and Figure 1; and
- (g) Statutory Declaration of Gary Baxter Cox and Exhibits GBC-1 – GBC 23.

The exhibits accompanying the above-listed declarations are references which were recently brought to the attention of the Applicants in connection with an opposition to an Australian application, that essentially corresponds to the U.S. priority application in this case. Copies of each of the above-listed Declarations and accompanying exhibits thereto, are enclosed.

The above information is presented so that the Patent and Trademark Office can determine any materiality thereof to the claimed invention. See 37 CFR 1.106(b) concerning the PTO duty to consider and use any such information. It is respectfully requested that the information be considered during the prosecution of this application.

Identification of the listed references is not to be construed an admission of any individual associated with the filing or prosecution of the subject application that such references are available as “prior art” against the subject application. Furthermore, Applicants do not waive any rights to appropriate action to establish patentability over any of the listed documents should they be applied as references against the claims of the subject application.

Applicants respectfully request that the Examiner review the listed reference(s) on the enclosed Form PTO/SB/08A and that the reference(s) be made of record in the file history of the application.

Pursuant to 37 C.F.R. § 1.97(c)(2), since this Supplemental Information Disclosure Statement is filed after the mailing date of a First Office Action on the merits, the Patent and Trademark Office will consider the statement if the statement is accompanied by the fee as specified in 37 C.F.R. § 1.97(c)(2), and is filed before any of a final action under § 1.113, a

notice of allowance under § 1.311, or an action which otherwise closes the prosecution in this application.

Accordingly, pursuant to 37 C.F.R. § 1.97(c)(2), the Patent Office is authorized to charge the required fee of \$180.00 to Human Genome Sciences, Inc., Deposit Account No. 08-3425. Applicants submit concurrently herewith, a Fee Transmittal, with appropriate fee(s). The Patent Office is further authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 08-3425.

Respectfully submitted,

Dated: March 6, 2001

Michele M. Wales  
Michele M. Wales (Reg. No. 43,975)  
Attorney for Applicants

Human Genome Sciences, Inc.  
9410 Key West Avenue  
Rockville, MD 20850  
Telephone: (301) 610-5772

Enclosures  
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION</b> (use as many sheets as necessary)				Complete If Known			
<div style="position: relative; height: 100px;"> </div>				Application Number		09/219,442	
				Filing Date		December 23, 1998	
				First Named Inventor		Hu, et al.	
				Group Art Unit		1647	
				Examiner Name		Saoud, C.	
		Attorney Docket Number		PF112P2D1			
U.S. PATENT DOCUMENTS							
Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	EA	5,861,301	B1	Terman <i>et al.</i>	01-19-1999		
	EB	5,840,693	B1	Eriksson <i>et al.</i>	11-24-1999		
FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	EC	WO	99/46364	A1	Human Genome Sciences, Inc.	09-16-1999	
	ED	AU	AU-B-70128/96	A1	Genentech, Inc.	09-30-1999	
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	EE	ANDERSSON W.F., "Human gene therapy," <i>Science</i> , 256:808-813 (1992).					
	EF	FRIEDMAN, T., "A brief history of gene therapy," <i>Nat. Genetics</i> , 2:93-98 (1992).					
	EG	WILLIAMS, R.S. "Southwestern internal medicine conference: prospects for gene therapy of ischemic heart disease," <i>Am. J. Med. Sci.</i> , 306(2): 129-136 (1993).					
	EH	HOCKEL <i>et al.</i> , "Therapeutic angiogenesis," <i>Arch. Surg.</i> , 128:423-429 (1993).					
	EI	GUZMAN <i>et al.</i> "Efficient gene transfer into myocardium by direct injection of adenovirus vectors," <i>Circ. Res.</i> , 73:1202-1207 (1993).					
	EJ	BELLOMO <i>et al.</i> , "Mice Lacking the Vascular Endothelial Growth Factor-B Gene (Vegfb) Have Smaller Hearts, Dysfunctional Coronary Vasculature, and Impaired Recovery From Cardiac Ischemia," <i>Circ. Research</i> , 89(2): e29-e35 (2000).					
	EK	COCKERILL <i>et al.</i> , "Angiogenesis: Models and Modulators" <i>Intl. Rev. Cytology</i> , 159:113-160 (1995).					
	EL	GAMBLE <i>et al.</i> , "Regulation of In Vitro Capillary Tube Formation by Anti-Integrin Antibodies," <i>J. Cell. Bio.</i> , 121(4): 931-943 (1993).					
	EM	GOLDSPIEL <i>et al.</i> , "Human Gene Therapy," <i>Clinical Pharmacy</i> , 12: 488-505 (1993).					
	EN	GRIMMOND <i>et al.</i> , "Cloning and Characterization of a Novel Human Gene Related to Vascular Endothelial Growth Factor," <i>Genome Research</i> , 6:124-131 (1996).					
Examiner				Date Considered			

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIP Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet	2	of	2	Attorney Docket Number	PF112P2D1		

  

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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	EO	HYDE <i>et al.</i> , "Correction of the ion transport defect in cystic fibrosis transgenic mice by gene therapy," <i>Nature</i> , 362: 250-255 (1993).	
	EP	KAY <i>et al.</i> , "In Vivo Gene Therapy of Hemophilia B: Sustained Partial Correction in Factor IX-Deficient Dogs," <i>Science</i> , 262:117-119 (1993).	
	EQ	KOLODKA <i>et al.</i> , "Hepatic Gene Therapy: Efficient Retroviral-Mediated Gene Transfer into Rat Hepatocytes in Vivo," <i>Somatic Cell and Molecular Genetics</i> , 19(5): 491-497 (1993).	
	ER	LITWIN <i>et al.</i> , "Role of Cytokines in Endothelial Cell Functions," <i>Human Cytokines</i> , 101-129.	
	ES	SHIBUYA <i>et al.</i> , "Nucleotide sequence and expression of a novel human receptor-type tyrosine kinase gene ( <i>flt</i> ) closely related to the <i>fms</i> family," <i>Oncogene</i> , 519-524 (1990).	
	ET	SILINS <i>et al.</i> , "Analysis of the Promoter Region of the Human VEGF-Related Factor Gene," <i>Biochem. Biophys. Res. Comm.</i> , 230: 413-418 (1997).	
	EU	STEWART <i>et al.</i> , "Insulin delivery by somatic cell gene therapy," <i>J of Mol. Endocrinology</i> , 11: 335-341 (1993).	
	EV	TOWNSON <i>et al.</i> , "Characterization of the Murine VEGF-Related Factor Gene," <i>Biochem. &amp; Biophys. Res. Comms.</i> , 220: 922-928 (1996).	
	EW	WALSH <i>et al.</i> , "Gene Therapy for Human Hemoglobinopathies," <i>P.S.E.B.M.</i> , 204: 289-300.	

  

Examiner	Date Considered
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